

From: [Cindy Beeler](#)
To: [Semerad, Jim L.](#)
Cc: [Alexis North](#); [Kyle Olson](#); [Dihle, Mark A.](#); [Peterson, Todd F.](#); [Jahraus, Tim M.](#); [Tricia Pfeiffer](#)
Subject: RE: Animal health issues
Date: 08/07/2012 02:44 PM

Jim -

Thanks for the reminder on getting this back to you. Your comments provided below in red were helpful in understanding the specific purpose of this memo, i.e. animal health issues and air quality. I have no further comments (except you could correct spelling of my surname in the memo - Beeler, no "h").

The PID readings (non-methane, non-ethane, VOCs and other toxic gases) at the Shilkes varied from 0.000 ppm to 0.087 ppm with a median of 0.030 ppm. The 0.087 reading was upon arrival as we were getting out of the car. I'll let **Alex** add any other observations she wants to make about the PID readings. She has created a map of her trail on the Shilke property with color-coded PID readings. No spikes were observed during the course of the path and generally the readings trended downwards from our arrival to departure.

Where we took PID readings within hydrocarbon plumes (from thief hatches for example) they were in the ~200-400 ppm range. At the perimeter of wellsite facilities with leaking components the PID readings fell to an average of 0.062 ppm. Again the wind speeds were usually > 10 mph.

Thanks,

Cindy Beeler

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To report an environmental violation: <http://www.epa.gov/compliance/complaints/index.html>
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▼ "Semerad, Jim L." ---08/03/2012 07:39:09 AM---Fyi I had some good feedback on my draft:

From: "Semerad, Jim L." <jsemerad@nd.gov>
To: Cindy Beeler/R8/USEPA/US@EPA, Alexis North/R8/USEPA/US@EPA, "Dihle, Mark A." <mdihle@nd.gov>, Kyle Olson/R8/USEPA/US@EPA, Tricia Pfeiffer/R8/USEPA/US@EPA, "Jahraus, Tim M." <tjahraus@nd.gov>, "Peterson, Todd F." <tftpeter@nd.gov>
Date: 08/03/2012 07:39 AM
Subject: RE: Animal health issues

Fyi

I had some good feedback on my draft:

Mark suggested that I get an update from the State Veterinarian. I contacted her and found that there has been no change – Dr. Keller stated that “There is no new evidence that has been presented to our department, which would change my earlier response”.

Tricia raised the issue of water testing that Oasis has completed – I believe that Kris Roberts has requested this information.

Cindy raised some points that I tried to address below in red text.

Thanks to all for your comments – I plan to final the memo next week so let me know if you have any other thoughts/suggestions/information that may result in a better memo.

Jim

From: Cindy Beeler [<mailto:Beeler.Cindy@epamail.epa.gov>]
Sent: Wednesday, August 01, 2012 3:34 PM
To: Semerad, Jim L.
Cc: Alexis North; Kyle Olson; Dihle, Mark A.; Peterson, Todd F.; Jahraus, Tim M.; Tricia Pfeiffer
Subject: Re: Animal health issues

Jim -

Thanks for your summary of site visit to the Shilke property. **Note that this Memo is not meant to be a summary of the 7/23/12 site visit to the Shilke's or an assessment of her cattle. Instead, it is a statement of my Division's findings in investigating her complaints that widespread animal health problems exist. We continue to receive questions about animal health due to her continuing complaints (we have been contacted by reporters as far away as New York). This memo is not meant to state that Jacki has not had animals with health problems (that is for her and veterinary professionals to determine). I think this distinction is critical. If there are widespread problems over a large geographical area, then it follows that the cause may be widespread (e.g.: general air pollution, water pollution, infection, etc.). If only Jacki is having problems, then it greatly limits the scope of the problem and the cause would likely be "close in".** It would probably be worth noting that Dan is also a County Commissioner. **Since we spoke to him about his cattle as a famer, I had decided to omit this but it's good information so I added it back in. I did not hear the reference to non-mineral rights owners, but I'm not sure I heard the entire conversation. He didn't give specific names/information but he made the statement.**

I'm assuming the "numerous site inspections" are at the Shilke property? **Again, this is about the entire area. For clarification, I changed the statement to read "...numerous inspections at (and in the general vicinity of) the Schilke farm....." My message is that we have never found high pollutant readings or excessive odors during any inspection in the area including our joint July 23 site inspection. Note that Jacki's complaints have included relatively large geographic areas. Our inspections coupled with testimony from veterinarians and area farmers supports our conclusion that we have found no indication of widespread problems with animal health caused by AQ. Let me know if you think that I should make additional changes for clarification. The site inspections at oil/gas facilities that we conducted together did show that emissions at many sites are being vented that are supposed to be controlled. Agreed – compliance is definitely an issue at these sources and we are currently writing enforcement letters. However, based on several factors such as distance, dispersion, amount of emissions, concentrations in the ambient air, etc., the AQ problems that we found are limited to regulatory compliance, not widespread animal health. Do you agree?**

Not sure if you wanted to add a sentence about the bubbling in the creek and that the Photo Ionization Detector, which measures non-methane, non-ethane VOCs and other toxic gases, did not see readings higher than 0.003 ppm (Alex to verify once data from PID and GPS unit downloaded). I would add though, that the bubbling activity was low - intermittent bubbling and I would estimate bubbles < 0.5 cm in diameter so perhaps unrealistic for a PID to pick up a reading. **I thought about including a comment about this but decided that it would be best handled in the report covering our site inspection that will be detailed. This Memo is trying to broadly**

cover findings for widespread animal health and our current position. Out of 5 days in the field during site inspection, wind speeds were rarely below 5 mph and PID readings on the down-wind perimeters of sites, observed on the PID screen, real-time, were ~0.4 ppm or below. Alex is underway downloading the PID and GPS data and she will report on the PID readings taken at the perimeter of several oil/gas sites and those taken along a road up wind of the Shilkes and at the Shilke property with the route on the property.

All that said, I want to remind folks that we in R8 Air Enforcement are not health or risk assessment experts. This is a great point and one that we struggle with. The complaint is about health which puts us in an awkward situation. Our first steps are always to look for some sort of noncompliance that could possibly cause the complaint but you are right that tying emissions directly to health is difficult at best. Part of our problem is with our title (Health Dept.) – people often assume that health is our primary role. We do our very best to help resolve complaints. In this case, we have reviewed ambient monitor data, installed more monitors in the oil patch, and have made numerous inspections to the area to assess AQ. Further, we brought the matter to the attention of the animal health experts both at the local level and at the state level. The veterinarians we consulted concluded there were no widespread animal health problems reported in the area, and the animal health symptoms reported by the Shilkes have not been verified by a veterinarian. Also neighboring/local ranchers have reported no animal health problems. I have also spoke with Jacki's consultant who stated that the test results indicate that long term studies are needed to determine if EPA needs to develop regulations (but she did not indicate that short term problems existed). We look forward to information from ASTDR but their timeframe and lack of intermediate information has not provided help in dealing with the daily/weekly complaints from Jacki.

Cindy Beeler

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All: I have drafted the attached memo in an attempt to summarize findings relating to animal health

From: "Semerad, Jim L." <jsemerad@nd.gov>
To: Alexis North/R8/USEPA/US@EPA, Cindy Beeler/R8/USEPA/US@EPA, "Jahraus, Tim M." <tjahraus@nd.gov>, Tricia Pfeiffer/R8/USEPA/US@EPA, Kyle Olson/R8/USEPA/US@EPA
Cc: "Peterson, Todd F." <tfpeterson@nd.gov>, "Dihle, Mark A." <mdihle@nd.gov>
Date: 08/01/2012 08:49 AM
Subject: Animal health issues

All:

I have drafted the attached memo in an attempt to summarize findings relating to animal health complaints.

Please review and provide comments.

Alex and Cindy: I included a brief statement about the apparent condition of the pets we saw during our site visit; however, I was not comfortable enough (with my limited cattle knowledge) to include any comments about them. I am considering deleting the site visit reference entirely – any comments/thoughts you provide in that category would be more than welcome.

I also included information from Veterinarians fyi.

I want to final the memo by 8/6.

Thanks for the comments.

Jim Semerad

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